

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.-29. (cancelled)

30. (Currently Amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface consisting of:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

~~a constituent~~ constituents of an the outer layer of a blood cell, a ~~constituent~~ constituents of an the outer layer of a mesothelial cell or a combination thereof, the ~~constituent~~ constituents being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at least one of chemical immobilization, photoimmobilization, adhesion, and drying,

the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not comprise whole, intact cells.

31. (Previously Presented) The hemocompatible surface of claim 30, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

32. (Currently Amended) The hemocompatible surface of claim 30, wherein the ~~constituent consists~~ constituents consist of:

an ~~oligosaccharide~~ oligosaccharides;

a ~~polysaccharide~~ polysaccharides;

lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or  
combinations thereof;

wherein the ~~constituent is~~ constituents are obtained from the outer layers ~~layer~~ of blood cells, the outer layers ~~layer~~ of mesothelial cells, or combinations thereof.

33. (Currently Amended) The hemocompatible surface of claim 30, wherein the ~~constituent consists~~ constituents consist of ~~heparin~~ heparan sulfate obtained from erythrocyte plasma membranes of animals or humans.

34. (Currently Amended) The hemocompatible surface of claim 30, wherein the ~~constituent~~ constituents ~~consists~~ consist of an oligosaccharide or a polysaccharide ~~portion~~ portions of a ~~proteoglycan~~ proteoglycans, wherein the ~~proteoglycan is~~ proteoglycans are hyaluronic acid, chondroitin sulfate, dermatan sulfate, heparan sulfate, or keratin sulfate, or a mixture thereof.

35. (Currently Amended) The hemocompatible surface of claim 30, wherein the ~~constituent consists~~ constituents consist of glycoporphins, glycosphingolipids, or combinations thereof.

36. (Previously Presented) The hemocompatible surface of claim 30, wherein the hemocompatible surface is non-thrombogenic, non-immunogenic or a combination thereof.

37. (Previously Presented) The hemocompatible surface of claim 30, wherein the article, device, or material consists of a high-molecular weight organic compound, a metal, a metal oxide, an alloy, a ceramic, a glass, a mineral, or a mixture thereof.

38. (Previously Presented) The article, device, or material comprising the

hemocompatible surface of claim 30.

39. (Currently Amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface comprising:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

~~a non-thrombogenic constituent~~ constituents of an ~~the~~ outer layer of a blood cell, ~~a non-thrombogenic constituent~~ constituents of an ~~the~~ outer layer of a mesothelial cell or a combination thereof, the non-thrombogenic ~~constituent~~ constituents separated and isolated from at least one of blood cells and mesothelial cells, the non-thrombogenic ~~constituent~~ constituents consisting of ~~an oligosaccharide~~ oligosaccharides; a ~~polysaccharide~~ polysaccharides; lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or combinations thereof, the non-thrombogenic ~~constituent~~ constituents being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at least one of chemical immobilization, photoimmobilization, adhesion, and drying, and

the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not comprise whole, entire cells.

40. (Previously Presented) The hemocompatible surface of claim 39, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

41. (Currently Amended) The hemocompatible surface of claim 39, wherein the non-thrombogenic ~~constituent~~ constituents consist of ~~heparin~~ heparan sulfate obtained from erythrocyte plasma membranes of animals or humans.

42. (Currently Amended) The hemocompatible surface of claim 39, wherein the

non-thrombogenic ~~constituent consists~~ constituents consist of an oligosaccharide or a polysaccharide ~~portion~~ portions of a ~~proteoglycan~~ proteoglycans, wherein the ~~proteoglycan is~~ proteoglycans are hyaluronic acid, chondroitin sulfate, dermatan sulfate, heparan sulfate, or keratin sulfate, or a mixture thereof.

43. (Currently Amended) The hemocompatible surface of claim 39, wherein the non-thrombogenic ~~constituent consists~~ constituents consist of glycoporphins, glycosphingolipids, or combinations thereof.

44. (Previously Presented) The hemocompatible surface of claim 39, wherein the hemocompatible surface is non-immunogenic.

45. (Previously Presented) The hemocompatible surface of claim 39, wherein the article, device, or material comprises a high-molecular weight organic compound, a metal, a metal oxide, an alloy, a ceramic, a glass, a mineral, or a mixture thereof.

46. (Previously Presented) The article, device, or material comprising the hemocompatible surface of claim 39.

47. (Currently Amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface consisting of:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

~~a non-thrombogenic constituent~~ constituents of ~~an~~ the outer layer of a blood cell, ~~a non-thrombogenic constituent~~ constituents of ~~an~~ the outer layer of a mesothelial cell or a combination thereof, the non-thrombogenic ~~constituent~~ constituents separated and isolated from at least one of blood cells and mesothelial cells, the non-thrombogenic ~~constituent~~ constituents being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at

least one of chemical immobilization, photoimmobilization, adhesion, and drying, and the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not consist of whole, entire cells.

48. (Previously Presented) The hemocompatible surface of claim 47, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

49. (Currently Amended) The hemocompatible surface of claim 47, wherein the non-thrombogenic ~~constituent consists~~ constituents consist of:

~~an oligosaccharide~~ oligosaccharides;

~~a polysaccharide~~ polysaccharides;

lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or

combinations thereof;

wherein the non-thrombogenic ~~constituent is~~ constituents are obtained from ~~the outer layers~~ layer of blood cells, ~~the outer layers~~ layer of mesothelial cells, or combinations thereof.